10	9	∞	7	. 6	5	4	ω	2	<u>→</u>	
BRS	BRS	BRS	BRS	BRS	BRS	BRS	BRS	BRS	BRS	Туре
L11	L10	L9	L8	L7	L6	4	L3	L2	Ľ1	L#
0		44	ω	494	19	ω	2	81	466	Hits
(light adj chain) same (translocat\$3 adj domain) same (substance adj P)	LHN same (substance adj P)	LHN	7 same modif\$7 same (substance adj P)	1 or 2 or 3 or 4 or 6	tetani adj (toxin or neurotoxin)	butyricum adj (toxin or neurotoxin)	beratti adj (toxin or neurotoxin)	clostridial adj (toxin or neurotoxin)	botulinum adj (toxin or neurotoxin)	Search Text
USPAT; EPO; JPO; DERWENT	USPAT; EPO; JPO; DERWENT	USPAT; EPO; JPO; DERWENT	USPAT; EPO; 2004/01/12 JPO; 16:54 DERWENT	USPAT; EPO; 2004/01/12 JPO; 16:46 DERWENT	USPAT; EPO; JPO; DERWENT	USPAT; EPO; JPO; DERWENT	USPAT; EPO; JPO; DERWENT	USPAT; EPO; JPO; DERWENT	USPAT; EPO; 2004/01/12 JPO; 16:42 DERWENT 16:42	DBs
2004/01/12 16:55	2004/01/12 16:54	2004/01/12 16:54	2004/01/12 16:54	2004/01/12 16:46	2004/01/12 16:45	2004/01/12 16:44	2004/01/12 16:44	2004/01/12 16:43	2004/01/12 16:42	Ð
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			<u>.</u>	<u>.</u>						Erro r Defi nitio
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С		16:59	JPO; DERWENT	16 and (substance adj p) and /	9	LIX	BKS	
)		2004/01/12	AT; EPO;		>	- -		
(16:58	VENT	(((`			
0		2004/01/12	USPAT; EPO; 2004/01/ JPO:	l6 and (substance adi n)	9	L17	BRS	14
		10:38	DERWENT	,				
0		2004/01/12		donovan adj stephen.in.	52	L16	BRS	13
		/ C:01	DERWENT					
0		2004/01/12	_	12 same (covalent\$2 or conjugate)		L13	BRS	12
(16:56	DERWENT	chain) same (substance adj P)	Ĭ			
>		2004/01/12	USPAT; EPO; 2004/01/	(light adj chain) same (heavy adj	13	112	BRS	
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(FILE 'HOME' ENTERED AT 17:02:59 ON 12 JAN 2004)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT

17:03:19 ON 12 JAN 2004

- L1 22817 S BOTULINUM (W) (TOXIN OR NEUROTOXIN)
- L2 1439 S CLOSTRIDIAL (W) (TOXIN OR NEUROTOXIN)
- L3 1 S BERATTI (W) (TOXIN OR NEUROTOXIN)
- L4 40 S BUTYRICUM (W) (TOXIN OR NEUROTOXIN)
- L5 433 S TETANI (W) (TOXIN OR NEUROTOXIN)
- L6 24013 S L1 OR L2 OR L3 OR L4 OR L5
- L7 726 S L6 (P) MODIF?
- L8 99984 S SUBSTANCE P
- L9 0 S L7 (P) L8
- L10 85 S L6 (P) L8
- L11 6 S L10 (P) CONJUGATE
- L12 6 DUPLICATE REMOVE L11 (0 DUPLICATES REMOVED)
- L13 0 S LHN (P) (SUBSTANCE P)
- L14 5 S (LIGHT CHAIN) (P) (HEAVY CHAIN) (P) (SUBSTANCE P)
- L15 0 S L14 (P) (CONJUAGE OR COVALENT? OR LINK?)
- L16 1 DUPLICATE REMOVE L14 (4 DUPLICATES REMOVED)
- L17 62 S DONOVAN STEPHEN/AU
- L18 5 S L17 AND L10
- L19 5 DUPLICATE REMOVE L18 (0 DUPLICATES REMOVED)
- L20 0 S L17 AND L14

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FILE 'MEDLINE' ENTERED AT 17:03:19 ON 12 JAN 2004
FILE 'CAPLUS' ENTERED AT 17:03:19 ON 12 JAN 2004
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FILE 'EMBASE' ENTERED AT 17:03:19 ON 12 JAN 2004
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FILE 'SCISEARCH' ENTERED AT 17:03:19 ON 12 JAN 2004
COPYRIGHT 2004 THOMSON ISI
FILE 'AGRICOLA' ENTERED AT 17:03:19 ON 12 JAN 2004
=> s botulinum (w) (toxin or neurotoxin)
         22817 BOTULINUM (W) (TOXIN OR NEUROTOXIN)
=> s clostridial (w) (TOXIN OR NEUROTOXIN)
          1439 CLOSTRIDIAL (W) (TOXIN OR NEUROTOXIN)
  s beratti (w) (TOXIN OR NEUROTOXIN)
L3
             1 BERATTI (W) (TOXIN OR NEUROTOXIN)
  s butyricum (w) (TOXIN OR NEUROTOXIN)
            40 BUTYRICUM (W) (TOXIN OR NEUROTOXIN)
=> s tetani (w) (TOXIN OR NEUROTOXIN)
           433 TETANI (W) (TOXIN OR NEUROTOXIN)
=> s 11 or 12 or 13 or 14 or 15
         24013 L1 OR L2 OR L3 OR L4 OR L5
=> s 16 (p) modif?
           726 L6 (P) MODIF?
=> s substance P
L8
         99984 SUBSTANCE P
=> s 17 (p) 18
L9
             0 L7 (P) L8
=> s 16 (p) 18
            85 L6 (P) L8
L10
=> s 110 (p) conjugate
             6 L10 (P) CONJUGATE
L11
=> duplicate remove 111
PROCESSING COMPLETED FOR L11
              6 DUPLICATE REMOVE L11 (0 DUPLICATES REMOVED)
=> d 111 1-6 ibib abs
L11 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS ON STN
                          2003:862780 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          139:358792
TITLE:
                          Botulinum toxin derivatives and methods to treat pain
                          associated with bone cancer
INVENTOR(S):
                          Donovan, Stephen
PATENT ASSIGNEE(S):
                          Allergan, Inc., USA
                          U.S., 24 pp., Cont.-in-part of U.S. Ser. No. 489,667.
SOURCE:
                          CODEN: USXXAM
DOCUMENT TYPE:
                          Patent
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                       KIND
                             DATE
                                             APPLICATION NO.
                                                              DATE
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PATENT NO. KIND DATE APPLICATION NO. DATE
US 6641820 B1 20031104 US 2000-625098 20000725
WO 2002007759 A2 20020131 WO 2001-US21984 20010712

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AE, AG, AL, AM, AT, AZ, BA, BB, BG, BR, BY, BZ, CH, CN, CO, CR, CU, CZ, DE, DR, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
                   HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
                   LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
                        CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, 33 A1 20020328 US 2001-922093 20010
       us 2002037833
                                                                                        20010803
                                  в2
                                         20021231
       us 6500436
                                         20020606
                                                               US 2001-938112
                                                                                         20010823
       us 2002068699
                                  Α1
                                                           us 2000-489667
                                                                                   A2 20000119
PRIORITY APPLN. INFO.:
                                                           us 2000-625098
                                                                                   A 20000725
       Methods for treating pain assocd. with bone tumor by administration to a patient of a therapeutically effective amt. of an agent are disclosed. The agent may include a ***clostridial*** ***neurotoxin***
AB
       component attached to a targeting moiety, wherein the targeting moiety is selected from the group consisting of transmission compds. which can be
       released from neurons upon the transmission of pain signals by the
       neurons, and compds. substantially similar to the transmission compds. Specifically disclosed are ***conjugates*** of ***botulinum***

***toxin*** components with ***substance*** ***P***
                               components with
                                              THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L11 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
                                     2002:721252 CAPLUS
ACCESSION NUMBER:
                                     138:1236
DOCUMENT NUMBER:
                                     Inhibition of Release of Neurotransmitters from Rat
TITLE:
                                     Dorsal Root Ganglia by a Novel Conjugate of a
Clostridium botulinum Toxin A Endopeptidase Fragment
                                     and Erythrina cristagalli Lectin
                                     Duggan, Michael J.; Quinn, Conrad P.; Chaddock, John A.; Purkiss, John R.; Alexander, Frances C. G.;
AUTHOR(S):
                                     Doward, Sarah; Fooks, Sarah J.; Friis, Lorna M.; Hall,
                                     Yper H. J.; Kirby, Elizabeth R.; Leeds, Nicola; Moulsdale, Hilary J.; Dickenson, Anthony; Green,
                                     Mark; Rahman, Wahida; Suzuki, Rie; Shone, Clifford C.;
                                     Foster, Keith A.
Centre for Applied Microbiology and Research, Porton Down, Salisbury, Wiltshire, SPR OJG, UK
Journal of Biological Chemistry (2002), 277(38),
CORPORATE SOURCE:
SOURCE:
                                     34846-34852
                                     CODEN: JBCHA3; ISSN: 0021-9258
                                     American Society for Biochemistry and Molecular
PUBLISHER:
                                     Biology
DOCUMENT TYPE:
                                     Journal
LANGUAGE:
                                     English
       Clostridial neurotoxins potently and specifically inhibit neurotransmitter release in defined cell types. Here we report that a catalytically active deriv. (termed LHN/A) of the type A neurotoxin from Clostridium botulinum
       has been coupled to a lectin obtained from Erythrina cristagalli to form a
                                This conjugate exhibits an in vitro selectivity for
       novel conjugate.
       nociceptive afferents compared with the anatomically adjacent spinal
       neurons, as assessed using in vitro primary neuronal culture systems to
       measure inhibition of release of neurotransmitters. Chem. conjugates prepd. between E. cristagalli lectin and either natively sourced LHN/A or
       recombinant LHN/A purified from Escherichia coli are assessed, and equivalence of the recombinant material are demonstrated. Furthermore, the dependence of inhibition of neurotransmitter release on the cleavage
       of SNAP-25 is demonstrated through the use of an endopeptidase-deficient
       LHN/A conjugate variant. The duration of action of inhibition of
       neurotransmitter released by the conjugate in vitro is assessed and is
       comparable with that obsd. with Clostridium botulinum neurotoxin.
       Finally, in vivo electrophysiol. shows that these in vitro actions have biol. relevance in that sensory transmission from nociceptive afferents through the spinal cord is significantly attenuated. These data
       demonstrate that the potent endopeptidase activity of clostridial
       neurotoxins can be selectively retargeted to cells of interest and that
       inhibition of release of neurotransmitters from a neuronal population of
       therapeutic relevance to the treatment of pain can be achieved.
REFERENCE COUNT:
                                             THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS
                                             RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
```

Α3

wo 2002007759

20030103

2002:241331 CAPLUS ACCESSION NUMBER:

136:2732 DOCUMENT NUMBER: Clostridial toxin derivatives and methods for treating TITLE:

pain

INVENTOR(S):

PATENT ASSIGNEE(S):

Donovan, Stephen Allergan Sales, Inc., USA U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S. Ser. No. 625,098. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
us 2002037833	Α1	20020328	us 2001-922093	20010803
us 6500436	В2	20021231		
us 6641820	B1	20031104	us 2000-625098	20000725
PRIORITY APPLN. INFO.	:		US 2000-489667 A2	20000119
			us 2000-625098 A2	20000725

Agents for treating pain, methods for producing the agents and methods for treating pain by administration to a patient of a therapeutically effective amt. of the agent are disclosed. The agent can include a clostridial neurotoxin, or a component or fragment or deriv. thereof, attached to a targeting mojety, wherein the targeting mojety is selected AB from a group consisting of transmission compds. which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially similar to the transmission compds. The agent comprises a botulinum toxin component covalently coupled to substance P.

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ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
```

2002:89857 ACCESSION NUMBER: CAPLUS

136:145260 DOCUMENT NUMBER:

TITLE: Clostridial toxin derivatives and methods for treating

pain

INVENTOR(S): Donovan, Stephen

Allergan Sales, Inc., USA PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: **Patent** LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                              KIND DATE
                                                            APPLICATION NO.
                                                                                   DATE
       wo 2002007759
                               Α2
                                       20020131
                                                            wo 2001-us21984 20010712
       wo 2002007759
                               Α3
                                       20030103
                 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
                  LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
                  RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
                  VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
            RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
                  DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
20 B1 20031104 US 2000-625098 20000725
       US 6641820
                                                        US 2000-625098
PRIORITY APPLN. INFO.:
                                                                                    20000725
                                                        US 2000-489667
                                                                               A2 20000119
```

Methods for treating a bone tumor, in particular pain assocd. with bone tumor, by administration to a patient of a therapeutically effective amt of an agent are disclosed. The agent may include a clostridial neurotoxin component attached to a targeting mojety, wherein the targeting mojety is selected from the group consisting of transmission compds. which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially similar to the transmission compds.

```
ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
```

2001:545729 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 135:132453

INVENTOR(S):

TITLE: Clostridial neurotoxin derivatives attached to targeting moieties, and methods using them for

treating pain Donovan, Stephen

Allergan Sales, Inc., USA PATENT ASSIGNEE(S):

PCT Int. Appl., 76 pp. SOURCE: CODEN: P Patent DOCUMENT TYPE: English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. DATE PATENT NO. KIND DATE wo 2001053336 Α1 20010726 wo 2001-US1529 20010117 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, 99 A1 20020606 US 2001-938112 2001 20010823 us 2002068699 us 2000-489667 20000119 PRIORITY APPLN. INFO.: The invention provides agents for treating pain, methods for producing the agents, and methods for treating pain by administration to a patient of a therapeutically effective amt. of the agent. The agent can include a clostridial neurotoxin, or a component of fragment or deriv. thereof, attached to a targeting moiety, wherein the targeting moiety is selected from transmission compose. Which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially similar to the transmission compds. THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN 1999:249106 CAPLUS ACCESSION NUMBER: 130:276767 DOCUMENT NUMBER: Conjugates of galactose-binding lectins and TITLE: clostridial neurotoxins as analgesics Duggan, Michael John; Chaddock, John Andrew INVENTOR(S): The Speywood Laboratory Limited, UK; Microbiological PATENT ASSIGNEE(S): Research Authority PCT Int. Appl., 50 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: **Patent** English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE 19990415 19981007 WO 1998-GB3001 wo 9917806 Α1 AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG 50 AA 19990415 CA 1998-CA 1998-2306350 CA 2306350 19981007 AU 9893574 19990427 AU 1998-93574 19981007 Α1 AU 741456 в2 20011129 19990527 ZA 9809138 ZA 1998-9138 19981007 EP 996468 20000503 EP 1998-946571 19981007 Α1 EP 996468 20030521 в1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2001518522 **T2** 20011016 JP 2000-514674 19981007 AT 240747 20030615 AT 1998-946571 19981007 Ε 19971008 PRIORITY APPLN. INFO.: GB 1997-21189 19981007 WO 1998-GB3001 W

AB A class of novel agents that are able to modify nociceptive afferent function is provided. The agents may inhibit the release of neurotransmitters from discrete populations of neurons and thereby reduce or preferably prevent the transmission of afferent pain signals from peripheral to central pain fibers. They comprise a galactose-binding lectin linked to a deriv. of a clostridial neurotoxin. The deriv. of the clostridial neurotoxin comprises the L-chain, or a fragment thereof, which

includes the active proteolytic enzyme domain of the light (L) chain, linked to a mol. or domain with membrane-translocating activity. The agents may be used in or as pharmaceuticals for the treatment of pain, particularly chronic pain. THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT => d his (FILE 'HOME' ENTERED AT 17:02:59 ON 12 JAN 2004) FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 17:03:19 ON 12 JAN 2004 22817 S BOTULINUM (W) (TOXIN OR NEUROTOXIN)
1439 S CLOSTRIDIAL (W) (TOXIN OR NEUROTOXIN)
1 S BERATTI (W) (TOXIN OR NEUROTOXIN) 40 S BUTYRICUM (W) (TOXIN OR NEUROTOXIN) 433 S TETANI (W) (TOXIN OR NEUROTOXIN) 24013 S L1 OR L2 OR L3 OR L4 OR L5 726 S L6 (P) MODIF? 99984 S SUBSTANCE P 0 S L7 (P) L8 5 S L6 (P) L8 85 6 S L10 (P) CONJUGATE 6 DUPLICATE REMOVE L11 (0 DUPLICATES REMOVED) => s LHN (p) (substance P) 0 LHN (P) (SUBSTANCE P) => s (light chain) (p) (heavy chain) (p) (substance P) L14 5 (LIGHT CHAIN) (P) (HEAVY CHAIN) (P) (SUBSTANCE P) => s 114 (p) (conjuage or covalent? or link?) 0 L14 (P) (CONJUAGE OR COVALENT? OR LINK?) => duplicate remove 114 DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH' KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n PROCESSING COMPLETED FOR L14 1 DUPLICATE REMOVE L14 (4 DUPLICATES REMOVED) => d 116 1 ibib abs L16 ANSWER 1 OF 1 MEDLINE on STN DUPLICATE 1 1998288285 ACCESSION NUMBER: **MEDLINE** PubMed ID: 9624139 DOCUMENT NUMBER: 98288285 TITLE: Regulated expression, processing, and secretion of dog mast cell dipeptidyl peptidase I. Wolters P J; Raymond W W; Blount J L; Caughey G H Department of Medicine and the Cardiovascular Research **AUTHOR:** CORPORATE SOURCE: Institute, University of California, San Francisco, California 94143-0911, USA. CONTRACT NUMBER: HL-07185 (NHLBI) HL-24136 (NHLBI) HL-54774 (NHLBI) JOURNAL OF BIOLOGICAL CHEMISTRY, (1998 Jun 19) 273 (25) SOURCE: 15514-20. Journal code: 2985121R. ISSN: 0021-9258. PUB. COUNTRY: United States Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE: LANGUAGE: English FILE SEGMENT: Priority Journals OTHER SOURCE: GENBANK-AF060171 ENTRY MONTH: 199807 Entered STN: 19980716 ENTRY DATE: Last Updated on STN: 20000303 Entered Medline: 19980709 Dipeptidyl peptidase I (DPPI) is a cysteine protease found predominantly in myelomonocytic cells, cytotoxic T-cells, and mast cells. Recent studies identify an intracellular role for mast cell-DPPI (MC-DPPI) by activating prochymase and protryptase to their mature forms. To better define MC-DPPI and to explore the possibility of extracellular roles, we purified MC-DPPI from mastocytoma cells. We found the dog C2 mastocytoma cell line to be the richest source yet described for DPPI, purifying up to 200 microg of enzyme per g of cells. Dog MC-DPPI has an Mr of approximately 175,000 and consists of four subunits, each composed of a

L1 L2 L3 L4

L5

L6

L7

L8

L9 L10

L13

L15

AB

```
propeptide, ***light** ***chain***, and ***heavy***

***chain*** . The ***h

y*** ***chain*** is N-gl

sequences of the ***heavy*** ***chain*** and propeptide are
      identical to those predicted from a cDNA clone we sequenced from a
      mastocytoma cDNA library. The dog cDNA-derived sequence is 86% identical to that of human DPPI. Dog mastocytoma cells incubated with 12-O-tetradecanoylphorbol-13-acetate increase expression of MC-DPPI mRNA. MC-DPPI maintains its activity for dipeptide substrates at a neutral to alkaline pH. Cells stimulated with ionophore or ***substance***
                     secrete MC-DPPI in parallel with the granule-associated
      mediators tryptase and histamine. Thus, dog mastocytoma cells secrete
      DPPI that is active at the pH of extracellular fluids, suggesting that
      MC-DPPI may act outside the cell.
=> s donovan stephen/au
               62 DONOVAN STEPHEN/AU
=> d his
      (FILE 'HOME' ENTERED AT 17:02:59 ON 12 JAN 2004)
      FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 17:03:19 ON 12 JAN 2004
             22817 S BOTULINUM (W) (TOXIN OR NEUROTOXIN)
              1439 S CLOSTRIDIAL (W) (TOXIN OR NEUROTOXIN)
                  1 S BERATTI (W) (TOXIN OR NEUROTOXIN)
                40 S BUTYRICUM (W) (TOXIN OR NEUROTOXIN)
               433 S TETANI (W) (TOXIN OR NEUROTOXIN)
             24013 S L1 OR L2 OR L3 OR L4 OR L5
               726 S L6 (P) MODIF?
             99984 S SUBSTANCE P
                0 S L7 (P) L8
85 S L6 (P) L8
                  6 S L10 (P) CONJUGATE
                  6 DUPLICATE REMOVE L11 (0 DUPLICATES REMOVED)
                  0 S LHN (P) (SUBSTANCE P)
                  5 S (LIGHT CHAIN) (P) (HEAVY CHAIN) (P) (SUBSTANCE P)
                  O S L14 (P) (CONJUAGE OR COVALENT? OR LINK?)

1 DUPLICATE REMOVE L14 (4 DUPLICATES REMOVED)
                62 S DONOVAN STEPHEN/AU
=> s 117 and 110
                5 L17 AND L10
=> duplicate remove 118
PROCESSING COMPLETED FOR L18
                  5 DUPLICATE REMOVE L18 (0 DUPLICATES REMOVED)
=> s 117 and 114
                0 L17 AND L14
=> d 119 1-5 ibib abs
L19 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
                               2003:696303 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                                139:224458
                                  ***Botulinum***
TITLE:
                                                            ***toxin***
                                  ***substance***
                                                            ***P***
                                                                      components for treating
                                inflammation and pain
INVENTOR(S):
                                  ***Donovan, Stephen***
                                Allergan Sales, Inc., USA
PATENT ASSIGNEE(S):
SOURCE:
                               U.S. Pat. Appl. Publ., 13 pp.
                                CODEN: USXXCO
DOCUMENT TYPE:
                                Patent
                                English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
      PATENT NO.
                            KIND
                                   DATE
                                                      APPLICATION NO.
                                                                            DATE
                                   20030904
      us 2003165541
                            Α1
                                                      US 2002-82691
                                                                            20020225
PRIORITY APPLN. INFO.:
                                                  US 2002-82691
                                                                            20020225
      The present invention relates to methods for treating neurogenic
      inflammation pain. The methods include administering an effective amt. of a compn. which includes a ***botulinum*** ***toxin*** component
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L 11 L12

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L14

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L20

sylated and

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***P***
                 ***substance***
                                                         component to a patient, thereby
      and a
      treating the neurogenic infl ation pain.
     ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
                                 2003:862780 CAPLUS
ACCESSION NUMBER:
                                 139:358792
DOCUMENT NUMBER:
                                 Botulinum toxin derivatives and methods to treat pain
TITLE:
                                 associated with bone cancer
                                    ***Donovan, Stephen***
INVENTOR(S):
PATENT ASSIGNEE(S):
                                 Allergan, Inc., USA
                                 U.S., 24 pp., Cont.-in-part of U.S. Ser. No. 489,667. CODEN: USXXAM
SOURCE:
                                 Patent
DOCUMENT TYPE:
                                 English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                         APPLICATION NO.
                                                                                DATE
      PATENT NO.
                             KIND
                                    DATE
                                                         us 2000-625098
                                                                                20000725
      US 6641820
                              в1
                                     20031104
      wo 2002007759
                                                         wo 2001-US21984
                                                                                20010712
                                     20020131
                              Α2
      wo 2002007759
                              Α3
                                     20030103
                 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
                 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
                 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
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      US 2002037833
                                     20021231
      us 6500436
                              В2
                                     20020606
                                                         us 2001-938112
                                                                                20010823
      us 2002068699
                              Α1
                                                     US 2000-489667 A2 20000119
US 2000-625098 A 20000725
PRIORITY APPLN. INFO.:
      Methods for treating pain assocd. With bone tumor by administration to a
      patient of a therapeutically effective amt. of an agent are disclosed. The agent may include a ***clostridial*** ***neurotoxin***
      component attached to a targeting moiety, wherein the targeting moiety is
      selected from the group consisting of transmission compds. which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially similar to the transmission compds. Specifically disclosed are conjugates of ***botulinum*** ***toxin* components with ***substance*** ***P***
                                                                                           ***toxin***
                                 36
                                         THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                                         RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L19 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                                 2002:89857
                                                 CAPLUS
                                 136:145260
DOCUMENT NUMBER:
TITLE:
                                 Clostridial toxin derivatives and methods for treating
                                 pain
                                    ***Donovan, Stephen***
INVENTOR(S):
PATENT ASSIGNEE(S):
                                 Allergan Sales, Inc., USA
SOURCE:
                                 PCT Int. Appl., 67 pp.
                                 CODEN: PIXXD2
DOCUMENT TYPE:
                                 Patent
LANGUAGE:
                                 English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
      PATENT NO.
                             KIND
                                    DATE
                                                         APPLICATION NO.
                                                                                DATE
      wo 2002007759
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                                     20020131
                                                         wo 2001-us21984 20010712
      wo 2002007759
                              Α3
                                     20030103
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                 HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
                 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
                 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
                 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG 641820 B1 20031104 US 2000-625098 20000725
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us 2000-625098

20000725

us 6641820 PRIORITY APPLN. INFO.:

us 2000-489667 A2 200001<u>19</u> Methods for treating a bone por, in particular pain assocd th bone tumor, by administration to a patient of a therapeutically effective amt. of an agent are disclosed. The agent may include a clostridial neurotoxin component attached to a targeting moiety, wherein the targeting moiety is selected from the group consisting of transmission compds. Which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially similar to the transmission compds.

L19 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

2002:241331 CAPLUS ACCESSION NUMBER:

136:273210 DOCUMENT NUMBER:

Clostridial toxin derivatives and methods for treating TITLE:

Donovan, Stephen INVENTOR(S): PATENT ASSIGNEE(S):

Allergan Sales, Inc., USA U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S. Ser. No. 625,098. SOURCE:

CODEN: USXXCO

Patent DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                      KIND
                             DATE
                                             APPLICATION NO.
                                                               DATE
                                                               20010803
                             20020328
                                             us 2001-922093
     us 2002037833
                        Α1
     us 6500436
                        В2
                             20021231
                                             us 2000-625098
                                                               20000725
     us 6641820
                        в1
                             20031104
                                          us 2000-489667
PRIORITY APPLN. INFO.:
                                                           A2 20000119
                                          us 2000-625098
                                                           A2 20000725
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Agents for treating pain, methods for producing the agents and methods for treating pain by administration to a patient of a therapeutically effective amt. of the agent are disclosed. The agent can include a ***clostridial*** ***neurotoxin*** or a component or fragment or deriv. thereof, attached to a targeting moiety, wherein the targeting mojety is selected from a group consisting of transmission compds. which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially similar to the transmission compds. The agent comprises a ***botulinum*** ***toxin*** component ***P*** covalently coupled to ***substance***

L19 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

2001:545729 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 135:132453

Clostridial neurotoxin derivatives attached to TITLE: targeting moieties, and methods using them for

treating pain

Donovan, Stephen INVENTOR(S): PATENT ASSIGNEE(S): Allergan Sales, Inc., USA SOURCE: PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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APPLICATION NO.
        PATENT NO.
                                    KIND
                                             DATE
                                                                                                  DATE
                                             20010726
                                                                      wo 2001-US1529
                                                                                                  20010117
        wo 2001053336
                                     Α1
                     AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                     CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
                     HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
                     LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
              CO, LV, MA, MD, MG, MK, MN, MW, MA, MZ, NO, NZ, PL, PT, RO, RO, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

2002068699 A1 20020606 US 2001-938112 20010823
        us 2002068699
                                                                 us 2000-489667
                                                                                            A 20000119
PRIORITY APPLN. INFO.:
        The invention provides agents for treating pain, methods for producing the
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agents, and methods for treating pain by administration to a patient of a therapeutically effective amt. of the agent. The agent can include a clostridial neurotoxin, or a component of fragment or deriv. thereof, attached to a targeting moiety, wherein the targeting moiety is selected from transmission compds. which can be released from neurons upon the

transmission of pain signals by the neurons, and compds. substantially similar to the transmission mpds.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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       FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 17:03:19 ON 12 JAN 2004
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1 S BERATTI (W) (TOXIN OR NEUROTOXIN)
40 S BUTYRICUM (W) (TOXIN OR NEUROTOXIN)
433 S TETANI (W) (TOXIN OR NEUROTOXIN)
24013 S L1 OR L2 OR L3 OR L4 OR L5
L1
L2
L3
L4
L5
L6
L7
                  726 S L6 (P) MODIF?
               99984 S SUBSTANCE P
L8
                   0 S L7 (P) L8
85 S L6 (P) L8
L9
L10
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6 DUPLICATE REMOVE L11 (O DUPLICATES REMOVED)
0 S LHN (P) (SUBSTANCE P)
L11
                     5 S (LIGHT CHAIN) (P) (HEAVY CHAIN) (P) (SUBSTANCE P) 0 S L14 (P) (CONJUAGE OR COVALENT? OR LINK?)
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L19
                     0 S L17 AND L14
L20
=> log y
                                                                          SINCE FILE
COST IN U.S. DOLLARS
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                                                                                  ENTRY
                                                                                               SESSION
FULL ESTIMATED COST
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
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STN INTERNATIONAL LOGOFF AT 17:13:14 ON 12 JAN 2004